



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBST2162-9
Job Sheet 194421



Part No: RBST2162-9

Job Qty: 4 pcs

Part Name: Pin



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 5/2/19

Job Tracking No:

Due Date: 6/20/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBST2100 REV 7 IPP Rev. A 19.04.04 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Lead Time	Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier			
110	Conventional Lathe - 1	4	6/20/19	6/20/19	0.00	2.00	Conventional Lathe - 1			DAS 71 9-89
		pcs					Conventional Lathe - 2			
120	QC 2	4	6/20/19	6/20/19	0.00	0.00	QC 2 - 1			DAS 71 9-89
							QC 2 - 12			
							QC 2 - 14			
							QC 2 - 17			
							QC 2 - 19			
							QC 2 - 2			
							QC 2 - 20			
							QC 2 - 22			
							QC 2 - 23			
							QC 2 - 25			
							QC 2 - 32			
							QC 2 - 33			
							QC 2 - 35			
							QC 2 - 39			
							QC 2 - 4			
							QC 2 - 40			
							QC 2 - 44			
							QC 2 - 45			
							QC 2 - 48			
							QC 2 - 49			
							QC 2 - 50			
							QC 2 - 51			
							QC 2 - 52			
							QC 2 - 57			
							QC 2 - 62			
							QC 2 - 63			
							QC 2 - 8			
							QC 2 - 66			
							QC 2 - 64			



Dart Aerospace Ltd.
1270 Aberdeen Street
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CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S184138



Part: RBST2162-9

Job No: 194421

Serial No/Batch: S184138

Revision: 7

Inspector:

Exp Date:

Instructions:

Date: 05/27/19

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				QC 2 - 65		
				QC 2 - 5		
				QC 2 - 71		
130	Conventional Mill - 1 - B4B	4 pcs	6/20/19	0.00 1.00	Conventional Mill - 1 - B4B	DAS 71 9-89 19-5-27
					Conventional Mill - 2 - B4B	
140	QC 2	4 pcs	6/20/19	0.00 0.00	QC 2 - 1	
					QC 2 - 12	
					QC 2 - 14	
					QC 2 - 17	
					QC 2 - 19	
					QC 2 - 2	
					QC 2 - 20	
					QC 2 - 22	
					QC 2 - 23	
					QC 2 - 25	
					QC 2 - 32	
					QC 2 - 33	
					QC 2 - 35	
					QC 2 - 39	
					QC 2 - 4	
					QC 2 - 40	
					QC 2 - 44	
					QC 2 - 45	
					QC 2 - 48	
					QC 2 - 49	
					QC 2 - 50	
					QC 2 - 51	
					QC 2 - 52	
					QC 2 - 57	
					QC 2 - 62	
					QC 2 - 63	
					QC 2 - 8	
					QC 2 - 66	
					QC 2 - 64	
					QC 2 - 65	
					QC 2 - 5	
					QC 2 - 71	
					150	QC 8
QC 8 - 14						
QC 8 - 17						
QC 8 - 20						
QC 8 - 25						
QC 8 - 3						
QC 8 - 32						
QC 8 - 33						
QC 8 - 35						
QC 8 - 39						
QC 8 - 4						
QC 8 - 44						
QC 8 - 45						
QC 8 - 49						
QC 8 - 58						
QC 8 - 8						
QC 8 - 9						
QC 8 - 68						
QC 8 - 67						
QC 8 - 1 (A)						
					Plex 5/2/19 8:20 AM Dart.lajeunesse.mari	

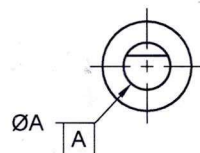
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	148 19/5/28
180 Outsource - 12 - Black Oxide	4 pcs	6/20/19		GRO002-VC	5 KH 2009-05-28
190 Packaging 2-1 - Receive - B4B	4 pcs	6/20/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	DP MAY 31 2019
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
200 QC 6	4 pcs	6/20/19	0.00 0.00	QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	DAS JUN 03 2019 40 9-89
210 Packaging 3-1 - Stock - B4B	4 pcs	6/20/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	DAS 28 9-89
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	

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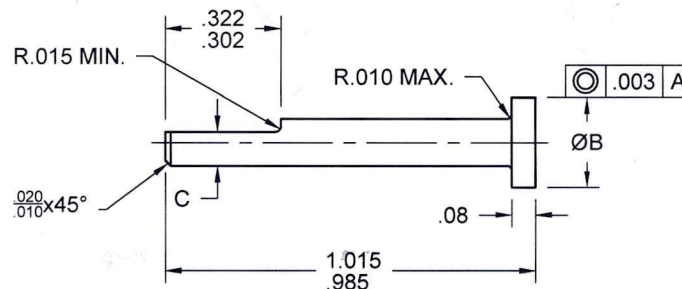
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
220 QC 21 - SA	4 pcs	6/20/19	0.00 0.00	QC 21 - SA - 21	
				QC 21 - SA - 70	
				QC 21 - SA - 53	
Part Op 110 - (Manufacture as per dwg) 1-Machine as per DWG. 2-Debur Descriptions: 120 - (QC2- Inspect parts off machine FAI/FAIB) 130 - (Manufacture as per dwg) 140 - (QC2- Inspect parts off machine FAI/FAIB) 150 - (QC8- Inspect parts - second check) 180 - Outsource12 (Outside Processing - Black Oxide) Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required 190 - (Receive & Inspect for Damage & Mat'l Certs) 200 - (QC6- All purchased or subcontracted products) 210 - (Identify as per dwg & Stock Location: _____) 220 - (QC21- Final Inspection - Work Order Release)					21 JUN 04 2019 6A138
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
98378A909	Perforator Pin .129" X 2-1/2"	4 Ea (1 ea)	110-Conventional Lathe - 1	5059696 GA041	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
110-Conventional Lathe - 1	98378A909	4	9	0	
Part Specifications					
Specifications could not be found.					

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	ADDED NOTE TO -1 BODY TO INSPECT BEFORE HEAT TREATING, ALSO CHANGED TOL., OF -1 ROLLER FIXTURE'S ØB, ØC, & ØE FROM +.002 -.000.	2/11/08	WP	DW
2	-15 CH'D LOCATING PIN TOLERANCE FROM Ø.2480 Ø.2475 TO Ø.250 P.F. -11 & -13. -11 & -13 CH'D FROM Ø.247 Ø.246 TO REAM Ø.290. REMOVED MS14102 & MS14104 CHAMFERED BEARINGS FROM LIST.	2/19/08	WP	GE
3	ADDED KST2128 & KST2162. -13 REMOVED 25° ANGLE FROM SECONDARY SEAT AND DELETED ØB DIMENSION. ADDED QTY TO -13 & -15 CHART.	4/22/08	WP	DW
4	-5 CH'D ROLLER RADIUS FROM .005 - .010, TO .015 - .020, -9 PIN RADIUS FROM .015 MAX., TO .015 MIN. CH'D -7 SLEEVE TO -7 GUIDE.	7/7/08	WP	DW
4A	CH'D T/N FROM KST2100.	11/19/09	RJC	
5	CORRECTED ERROR -3 WAS .165 NOW .172 FOR ROLLER CLEARANCE. ADDED REVISIONS TO ALL PAGES.	1/18/10	WP	DW



-9
PIN



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 19442 (MCS)
190502

NOTES:

- BREAK ALL SHARP CORNERS (.015/.03).

TOOL #	ØA +.000 -.001	ØB +.005 -.002	C +.000 -.020	MATERIAL
RBST2120	.129	.188	.104	MCMaster-CARR PN: 98378A909
RBST2128	.129	.188	.104	MCMaster-CARR PN: 98378A909
RBST2162	.129	.188	.104	MCMaster-CARR PN: 98378A909

RED BARN MACHINE	
TITLE RBST2100 SERIES TRI-ROLLER SWAGING TOOL; PIN	
DWG NO. TOOL# (see chart)-9	REV 7
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS XXX ± .005 XX ± .01 X ± .1	
FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-23-08
SHEET 6 of 9	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Dart Aerospace Ltd.
1270 Aberdeen St
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043564



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB043564

PO Date: 5/28/19

Due Date: 6/3/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Guerin, Kimberley
kguerin@dartaero.com

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2019-05-29

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	193135	RBE703A94-1130-01-33	Adjuster -Issue P/O to Groupe Altech; PO _____ Black oxide finish, MIL-C-13924C Class 1: MIL-C-16173 Grade 4 -Certificate of Conformity is required	Firmed	-	6/3/19	36 pcs	0 pcs	36 pcs	\$3.00/pcs	\$108.00
2	194421	RBST2162-9	Pin Outsource12 (Outside Processing - Black Oxide) Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	-	6/3/19	4 pcs	0 pcs	4 pcs	\$3.00/pcs	\$12.00
Grand Total:											\$120.00

DAS
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9-89

Handwritten:
JH
GK
5-29-19



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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB043564



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 5/29/19 10:55 AM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance

(019568-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

019568- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
30-May-2019		SVETLANA DORZHIYEVA		POHB043564				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBE703A94-1130-01-33 Rev.	RBE703A94-1130-01-33 BLACK OXIDE COATING: MIL-C-13924 CLASS 1 : MIL-C-16173, GRADE 4	BLACK-OXIDE CH	36	36	0	0	0
2	RBST2162-9 Rev.	RBST2162-9 01 -OXIDE BLACK [OXIDE BLACK] MIL-C-13924C CLASS 1	OXIDE-BLACK CH	4	4	0	0	0

RECEIVED
 MAY 31 2019
 DART AEROSPACE LTD.

DAS
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9-89

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

[Signature]

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.